produced in high purity. The production of human milk proteins by recombinant DNA techniques permits greater flexibility in the make-up and utilization of compositions in accordance with this invention when utilized to enhance the diet of infants, particularly VLBW infants or to enhance the nutritional value of synthetic infant formulas, either cow milk-based or soy protein-based or meat-based, as indicated hereinabove. Instead of recombinant human milk proteins, one could employ in the practices of this invention human milk proteins produced by chemical synthesis where applicable or desired. Such chemically synthesized human milk proteins, like the corresponding recombinant proteins, would also be free of HIV and accordingly would also be usefully employed in the practices of this invention.

As will be apparent to those skilled in the art in the light of the foregoing disclosures, many modifications, alterations and substitutions are possible in the practices of this invention without departing from the spirit or scope thereof.

What is claimed is:

1. In an artificial human infant formula based on bovine or soy proteins, the improvements comprising a recombinant human virus-free human milk protein having the same function as human milk protein in approximately the amount present in human milk wherein the recombinant human milk protein is selected from the group consisting of secretory immunoglobulin-A, lactoferrin, lactoperoxidase, lysozyme, alpha-casein, kappa-casein, and combinations thereof.

2. A human infant formula as in claim **1**, wherein the human milk protein is comprised of only secretory immunoglobulin A.

3. A human infant formula as in claim **1**, wherein the human milk protein is comprised of only lactoferrin.

4. A human infant formula as in claim **1**, wherein the human milk protein is comprised of only lactoperoxidase.

5. A human infant formula as in claim **1**, wherein the human milk protein is comprised of only lysozyme.

6. A human infant formula as in claim **1**, wherein the human milk protein is comprised of only alpha-casein.

7. A human infant formula as in claim **1**, wherein the human milk protein is comprised of only kappa-casein.

8. A human infant formula as in claim **1** as wherein the formula is concentrated by evaporation of water.

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